

**Work Order ID 52145**

Thursday, September 17, 2009 8:09:23 AM



Page 1

Item ID: D209-669-013

Accept



Setup Start



Revision ID: B

Stop



Item Name: Skidtube LH

Start Date: 9/18/2009 Start Qty: 1.00



Cust Item ID:

Required Date: 10/9/2009 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

*RL mtk*

Date: 09-9-17

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D209-669-013	Rev B								
DSI 9450	Rev A								

100

0.00



DC

DOCUMENT CONTROL

Memo

0.00

Document Control

Photocopy bluefile &amp; type labels per PPP d209-669-013 CHG003

*509/10/05*

110

0.00



Packaging

Pick Kit

Memo

0.00

Packaging

*PC 9/14/05 @***52112**

**Work Order ID 52145**

Thursday, September 17, 2009 8:09:23 AM

Page 2

Item ID: D209-669-013

Accept

Revision ID: B

Item Name: Skidtube LH

Start Date: 9/18/2009 Start Qty: 1.00

Required Date: 10/9/2009 Req'd Qty: 1.00

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

120

QC4- 100% Inspect kits for completeness

0.00

27509/10/15



QC

Memo

0.00

Quality Control

⑩

d

130

Packaging

0.00



Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPPD209-669-013  
Location: \_\_\_\_\_

120C

9/10/15

⑩

140

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

09/10/06  
R 09-10-6

# Picklist Print

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Thursday, September 17, 2009 8:09:22 AM

Work Order ID: 52145

Parent Item: D209-669-013RevB

Parent Item Name: Skidtube LH


Comments:

Start Date: 9/18/2009

Required Date: 10/9/2009

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D209-669-043RevB		Manufactured	No			110	Each	3.0000	1.0000			
												
Replacement Skidtube												

52112 *CC 9/17/09*

Warehouse  
Location

Loc Qty

Loc Code

Premier

Mezz

3

22797

1

39205

1

39206

1

S D2917-1RevB

Manufactured

No

110

Each

0.0000

2.0000



Saddle LH

S D2918-1RevB

Manufactured

No

110

Each

3.0000

2.0000



Saddle LH

52127 *SEP*  
52132  
~~52131~~ 9/10/09 *CC*

Warehouse

Location

Loc Qty

Loc Code

Main Warehouse

ST

3

43755

1

51329

2

# Picklist Print

Thursday, September 17, 2009 8:09:22 AM

Work Order ID: 52145



Parent Item: D209-669-013RevB



Parent Item Name: Skidtube LH


Start Date: 9/18/2009

Required Date: 10/9/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN4-51A  Bolt		Purchased	No			110	Each	354.0000	8.0000 ✓			

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST	354	
110328	2	
111635	102	
112314	100	
112489	100	
112641	50	

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

1112314

D2570RevB

Manufactured No

110

Each

139.0000

24.0000



Bushing



1352214 10/9/09 6

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST	15	
47246	15	
Main Warehouse		
ST36	124	
50356	124	

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# Picklist Print

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Thursday, September 17, 2009 8:09:22 AM

Work Order ID: 52145



Parent Item: D209-669-013RevB



Parent Item Name: Skidtube LH

Start Date: 9/18/2009

Required Date: 10/9/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MS21042L4  Nut		Purchased	No			110	Each	8,148.000	24.0000	✓		

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST	8148
107499	5
108145	4
110450	1
110507	184
111827	5996
112314	1893
15924	0
7690	24
8182	41

M112314

AN5-36A



Bolt

Purchased

No

110

Each

555.0000

4.0000



PC 9/16/09

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST	555
109545	11
110467	7
110731	4
112243	20
112314	463
112385	50

M112314

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Work Order ID: 52145

Parent Item: D209-669-013RevB

Parent Item Name: Skidtube LH


Comments:


Start Date: 9/18/2009

Required Date: 10/9/2009

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
S AN960JD516  Washer		Purchased	No			110	Each	1,097.000	8.0000			

M112794 

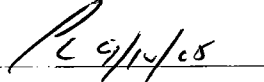
Warehouse                      Loc Qty                      Loc Code  
Location

Main Warehouse

ST	1097
100564	2
106167	6
107534	34
107959	43
108246	46
108672	2
109059	49
109752	22
110363	46
110523	57
111279	43
112082	247
112314	500

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S MS21042L5  Nut	Purchased	No				110	Each	1,279.000	4.0000			
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Warehouse                      Loc Qty                      Loc Code  
Location

Main Warehouse

ST	1279
110382	10
111636	269
112314	1000

M111636  
ATT

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Work Order ID: 52145



Parent Item: D209-669-013RevB



Parent Item Name: Skidtube LH

Start Date: 9/18/2009

Required Date: 10/9/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
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AN4-7A		Purchased	No			110	Each	201.0000	16.0000			
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8



Bolt



1112794 6/7/10

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST	201	
----	-----	--

111668	1	
--------	---	--

112314	50	
--------	----	--

112385	50	
--------	----	--

112641	100	
--------	-----	--

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Work Order ID: 52145



Parent Item: D209-669-013RevB



Parent Item Name: Skidtube LH

Start Date: 9/18/2009

Required Date: 10/9/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

AN960JD416

Purchased

No

110

Each

8,313.000

32.0000



Washer

Warehouse  
Location

Loc Qty

Loc Code

Main Warehouse

ST

8313

102929

2

105906

4

106277

2

107321

23

107939

114

108161

553

108827

31

109249

69

110523

340

111279

101

111916

2187

112314

4887

16941

0

D2929RevB

Manufactured

No

110

Each

15.0000

2.0000



Spacer

Warehouse  
Location

Loc Qty

Loc Code

Main Warehouse

ST

15

43376

15



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Work Order ID: 52145

Parent Item: D209-669-013RevB

Parent Item Name: Skidtube LH

Comments:


Start Date: 9/18/2009

Required Date: 10/9/2009

Start Qty: 1.00


Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

D2930RevB		Manufactured	No			110	Each	11.0000	2.0000			
												
Spacer												


Warehouse	Loc Qty	Loc Code
Location		

Main Warehouse		
ST	11	
43378	11	

D3405-041RevB		Manufactured	No			110	Each	10.0000	1.0000			
												
Lug Assembly												

Warehouse	Loc Qty	Loc Code
Location		

Main Warehouse		
ST	10	
51254	10	

AN4C47A		Purchased	No			110	Each	222.0000	4.0000			
												
Bolt												

Warehouse	Loc Qty	Loc Code
Location		

Main Warehouse		
ST	222	
110847	4	
112431	18	
112489	100	
112641	100	

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Work Order ID: 52145



Parent Item: D209-669-013RevB



Parent Item Name: Skidtube LH

Start Date: 9/18/2009

Required Date: 10/9/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
S MS21043-4  Nut		Purchased	No			110	Each	1,397.000	5.0000 ✓			

<u>Warehouse</u> <u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
OFFSHORE		
FG	40	
104603	40	
Main Warehouse		
ST	1357	
111819	35	
112243	22	
112314	1000	
112492	300	

D3405-043RevB

Manufactured

No

110

Each

12.0000

1.0000 ✓

Lug Assembly

<u>Warehouse</u> <u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
Main Warehouse		
ST	12	
46589	1	
46863	1	
51255	10	

7/1/2314

51652

Se 9/14/05 C

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Work Order ID: 52145

Parent Item: D209-669-013RevB

Parent Item Name: Skidtube LH



Comments:

Start Date: 9/18/2009

Required Date: 10/9/2009

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
S D3407-041RevE  Tow Ring		Manufactured	No			110	Each	35.0000	1.0000 ✓			

Warehouse Loc Qty Loc Code

Location

OFFSHORE

FG

3

35780

3

Main Warehouse

ST

1

48356

1

Main Warehouse

ST464

31

51659

31

D3456-1RevA

Manufactured

No

110

Each

232.0000

1.0000 ✓

Washer

Warehouse Loc Qty Loc Code

Location

OFFSHORE

FG

7

25701

7

Main Warehouse

ST

225

46752

25

51653

200

51659

51653

PC 9/14/09 ①

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Work Order ID: 52145



Parent Item: D209-669-013RevB



Parent Item Name: Skidtube LH

Start Date: 9/18/2009

Required Date: 10/9/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

S D3417-5RevE



Manufactured

No

110

Each

152.0000

2.0000



✓

*Signature* 9/17/09

Washer

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

152

51649

152

51649

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# **DART SERVICE INSTRUCTION**

**TO AMEND INSTALLATION INSTRUCTIONS IIN-D209-669 REV. B**

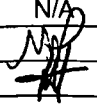
SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 32145

## **INSTRUCTIONS:**

1) FOR D209-669-011/-012/-013/-014 SKID TUBES @ CHANGE 003 AND SUBSEQUENT, MODIFY THE FOLLOWING:

- a) REPLACE THE D2968-041 TOW RING WITH THE D3407-041 TOW RING ASSEMBLY.
- b) REPLACE THE D2736-1 AND D2736-3 GHW LUGS WITH THE D3405-041 AND D3405-043 LUG ASSEMBLIES.
- c) AMEND THE PARTS LIST IN SECTION 5.0 OF INSTALLATION INSTRUCTIONS IIN-D209-669 REV. B AS SHOWN ON PAGE 2 OF THIS DSI.

NOTE: ALL INSTALLATION FASTENERS FOR THE ABOVE CHANGES HAVE BEEN UPDATED. SEE THE AMENDED PARTS LIST ON PAGE 2 FOR DETAILS.

A	NEW ISSUE	AJS	09.02.24
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9450	SHEET 1 OF 3
APPROVED		TITLE	SCALE
DE APPR.		SKIDTUBE INSTALLATIONS	NTS
DATE	09.02.24	<small>COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY MANNER WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD</small>	

# 5.0 PARTS LIST

52145

ITEM	QTY -011	QTY -012	QTY -013	QTY -014	QTY -041	QTY -043	PART NUMBER	DESCRIPTION
	X						D209-669-011	SKIDTUBE INSTALLATION, LH (AH-1W/J)
		X					D209-669-012	SKIDTUBE INSTALLATION, RH (AH-1W/J)
			X				D209-669-013	SKIDTUBE INSTALLATION, LH (AH-1P/F/S)
				X			D209-669-014	SKIDTUBE INSTALLATION, RH (AH-1P/F/S)
	1	1			X		D209-669-041	REPLACEMENT SKIDTUBE (AH-1W/J)
			1	1		X	D209-669-043	REPLACEMENT SKIDTUBE (AH-1P/F/S)

IS:

50	4	4	1	1			D3405-041	LUG ASSEMBLY
51	8	8	4	4			AN4C47A	BOLT
52	16	16	8	8			D2570	BUSHING
53	8	8	4	4			MS21043-4	NUT
54			1	1			D3405-043	LUG ASSEMBLY
60	1	1	1	1			D3407-041	TOW RING ASSEMBLY
61	1	1	1	1			D3456-1	WASHER
62	1	1	1	1			MS21043-4	NUT
63	2	2	2	2			D3417-5	WASHER

WAS:

50	4	4	1	1			D2736-1	GHW LUG
51	8	8	4	4			AN4-46A	BOLT
52	16	16	8	8			D2570	BUSHING
53	8	8	4	4			MS21042L4	NUT (OR MS21042-4)
54			1	1			D2736-3	GHW LUG
60	1	1	1	1			D2968-041	TOW RING
61	1	1	1	1			AN970-4	WASHER
62	1	1	1	1			MS21042L4	NUT (OR MS21042-4)

DESIGN	AJS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA
DRAWN	AJS	
CHECKED		DRAWING NO.
MFG. APPR.	N/A	DSI 9450
APPROVED		TITLE
DE APPR.		SKIDTUBE INSTALLATIONS
DATE	09.02.24	SCALE
		NTS

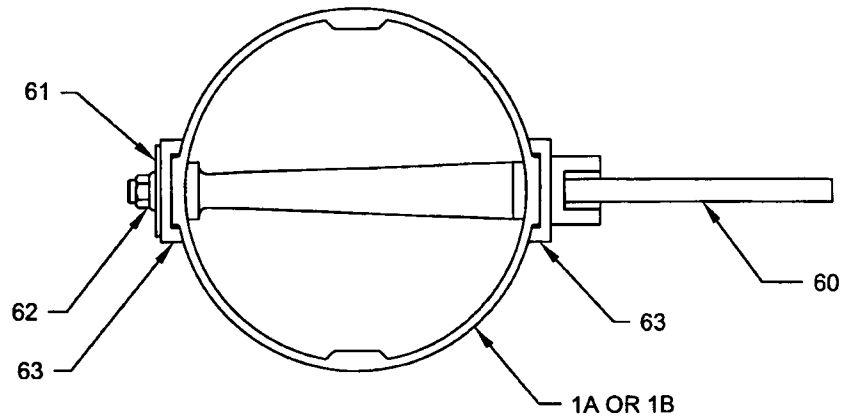
REV. A  
SHEET 2 OF 3

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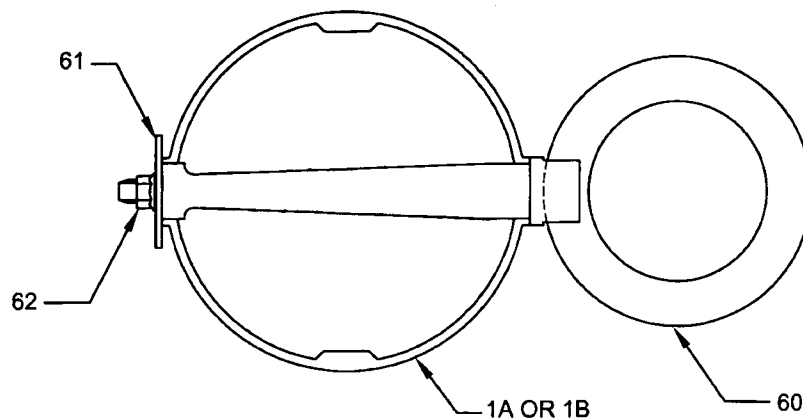
INSTALL TOW RING ASSEMBLY AS SHOWN BELOW (REFER TO SECTION F-F OF IIN-D209-669 REV. B.

52145

**IS:**



**WAS:**



NO PICTORIAL CHANGE REQUIRED FOR GROUND HANDLING WHEEL LUG CHANGES.

DESIGN	AJS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9450	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.		SKIDTUBE INSTALLATIONS	NTS
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